	7
77	7
~	-
ľ	
7	
_	
<	Ľ,
)

001 9 2

63

ARCUMITY CLASSIFICATION OF THIS PAGE (Mes Date Sent



and the second s	والمراوي والمراوي والمراوية والمناوية والمراوية والمراوية والمراوية والمراوية والمراوية والمراوية والمساورة
REPORT DOCUMENTATION PAGE	READ INVERUCTIONS REPORE COMPLETING FORM
REPORT HUNDER	PARCIPIENTS CATALOG HUMBER
T.R. ONR-11 AD-111 46) D
4. TITLE (and Substite)	S. TYPE OF REPORT & PERSON COVERED
Perceptions of Supervisor-Subordinate	Interim
Relations among Hispanic and Mainstream Recruits	6. PERFORMING ORG. REPORT HUNDER
Y. AUTHORIE	S. CONTRACT ON SHART HUMBERY
Harry C. Triandis Gerardo Marin Chi-chiu Harry Hui Hector Betancourt Judith Lisansky Victor Ottati	N 00014-80-C-0407
Performing organization name and abbred	TO. PROGRAM EL EMENT, PROJECT, YANK
Department of Psychology University of Illinois 603 E. Daniel, Champaign, IL 61820	NR 170-906
II. CONTROLLING OFFICE HAME AND ADDRESS	IL REPORT DATE
Organizational Effectiveness Research Programs	April, 1982
Office of Naval Research (Code 442) Arlington, VA 22217	13. NUMBER OF PASES
14. MONITORING ASENCY HAME & ADDRESSIS dillerent from Controlling Office)	TE SECURITY CLASE (of this report)
	Unclassified
	TEA DECLASSIFICATION/BOOMERAGIES
6. DISTRIBUTION STATEMENT (of the Roport)	МАЛ (нистров и муте с наприя провительной подражений под подражений под

Approved for public release; distribution unlimited. Reproduction in whole or in part is permitted for any purpose of the U.S. Government.

17. CHETRIBUTION STATEMENT (of the abstract entered in Block to, if different from A

TO SUPPLEMENTARY NOTES

Supersedes AD- A114 899

(wrong noc on purke)

19. KEY WORDS (Continue on reverse class it acqueezes and identity by block member)

Hispanics, recruits, supervisor-subordinate relations, Power Distance, Uncertainty Avoidance, Collectivism, Masculinity, Initiating Structure, Consideration

20. ABSTRACT (Continue on reverse elde il recessory and identify by block market)

ightarrow Samples of Hispanic and Mainstream Navy recruits answered a questionnaire that obtained their perceptions of supervisor-subordinate relations. In addition, a number of items measured values related to

DD 1 JAN 79 1473

EDITION OF ! HOV 65 IS OMIGULETE 5/N 0102-LF-014-6401

Unclassified

supervisor-subordinate behaviors such as Power Distance, Uncertainty Avoidance, Collectivism, and Masculinity (Hofstede's, 1980). Evidence was found that the Hispanics were higher than the Mainstream respondents on Power Distance and Uncertainty Avoidance; and lower on Masculinity. There was also a trend suggesting higher Hispanic scores on Collectivism, and descriptions of a sample of supervisory situations suggested a greater tolerance by Hispanics for supervisors who are non-participative (high Power Distance); but there were no preferences for supervisors high in initiating structure and collectivism. Reactions to supervisors high or low on Initiating Structure and Consideration revealed strong similarities between Hispanic and Mainstream recruits. Both samples liked the supervisors high on both traits much more than the supervisors low in both characteristics. However, there was a trend for the Hispanics to prefer the high Consideration -- low Initiating Structure supervisor more than the high Initiating Structure--low Consideration supervisor. Comparisons of the Navy samples with the world-wide norms provided by Hofstede's study of a multinational corporation, indicated that the Navy samples were extremely high on Power Distance, high on Uncertainty Avoidance and Masculinity, and very close to the U.S. means on Individualism. Thus, a distinct military culture appears to exist, which attracts those who differ from the U.S. population on Power Distance, Uncertainty Avoidance, and Masculinity.

Unclassified

5/H 0107- LF- 014- 4601

EXCURITY CLASSIFICATION DE THIS PASECULOS Date Entered

Executive Summary

A review of the literature suggested that Hispanics may be higher than Mainstream individuals on Power Distance (differentiation according to status, clear
separation of people by status), Uncertainty Avoidance (preference for clear
rules, certainty, fear of failure), and Collectivism (goals and welfare of the
group takes precedence over those of the individual), and about the same as the
Mainstream on Masculinity (work is a central value of life; accept long hours;
see large differences between men and women). If this is true it should have
implication for the kinds of supervisors that Hispanics and Mainstream recruits
will find most acceptable.

Data collected from Hispanic and Mainstream Navy recruits indicated that, indeed, the expected differences in Power Distance and Uncertainty Avoidance were obtained. Also, there was a trend coinciding with the expected difference on collectivism. However, contrary to expectations the Mainstream respondents were higher on Masculinity than the Hispanic sample.

Correlations between these variables and indices of acculturation and biculturalism showed the expected results: the more acculturated the Hispanics the more similar they were to the Mainstream on Power Distance and Uncertainty Avoidance. No significant correlations were found for Collectivism and Masculinity.

Comparison of the Navy samples with world-wide norms on the same questionnaire items, showed that the Navy samples are extremely high on Power Distance, high on Uncertainty Avoidance and Masculinity and close to the U.S. means on Collectivism. This indicates that there is a distinct military culture that is very high on Power Distance, Uncertainty Avoidance and Masculinity, and close to the U.S. mean (i.e. high) on Individualism.

The second second is the second secon

Examination of Hispanic and Mainstream preferences for various kinds of supervisors showed that the Hispanics were more willing than the Mainstream recruits to tolerate a non-participatory (high Power Distance) supervisor. However, on the other dimensions clear differences were not found.

Reactions to supervisors described as high or low in Initiating Structure (clear about goals, providing structured assignments and follow up) and high or low on Consideration (showing concern for personal problems of the people who work for them) indicated that both Hispanics and Mainstream recruits prefer supervisors who are high on both attributes, and reject supervisors who are low on both attributes. However, the Mainstream viewed supervisors high on Initiating Structure and low on Consideration to be more acceptable than did the Hispanics. Also, the Hispanics found the supervisor low in Initiating Structure and high in Consideration to be more acceptable than did the Mainstream subjects. Thus, while the Navy recruits are extremely similar to each other they do show slight reversals of preferences for supervisors. This suggests that the Hispanics give more weight to interpersonal relationships than do the Mainstream recruits.

Perceptions of Supervisor-Subordinate Relations among Hispanic and Mainstream Recruits

3

Harry C. Triandis, Chi-chiu Harry Hui, Judith Lisansky, Victor Ottati

University of Illinois at Urbana-Champaign

THE REPORT OF A COUNTY OF THE PARTY OF THE P

Gerardo Marín, Hector Betancourt Spanish Speaking Mental Health Research Center

University of California at Los Angeles

A review of the literature concerning Hispanics in the United States (Lisansky, Note 1) suggests that there may be some differences between Hispanics and Mainstream Americans with regard to values such as those described by Hofstede (1980). If such differences do exist, they should have specific implications concerning the perceptions of supervisor—subordinate relations as found among Hispanic and Mainstream samples. The present paper first explores whether the hypothesized differences in values can be detected among Navy recruits, and secondly examines whether there are corresponding differences between Hispanics and Mainstream Navy recruits in their perceptions of supervisor—subordinate relations.

Hofstede's book, <u>Culture's Consequences</u> (1980), discusses four configurations of work-related values which appear to vary cross-culturally: Power Distance, Uncertainty Avoidance, Individualism, and Masculinity. After a brief definition of each term, we will review what the literature on Hispanics says about each of these values.

The term Power Distance refers to the level of importance which a culture assigns to differentiation by status. Status is used in the broadest sense to refer to differences in prestige, wealth, and power, as well as differences in the relative status of both groups and individuals. Employed in this way, the term Power Distance subsumes the concept of social class and other aspects of social stratification. Power distance refers to the rigidity of stratification, so that societies in which social, economic or political distance creates large demarcations between groups or individuals, are said to be characterized by high Power Distance

Hofstede makes the important point that both the more dominant group and the subordinate group participate in a system of interconnected values justifying the established order. He notes: "Differences in the exercise of power in a hierarchy relate to the value systems of both bosses and subordinates and not to the values of the bosses only, even though they are the more powerful partners."

Uncertainty Avoidance refers to a society's attitudes and behaviors with regard to the norms, and rules generated by that society. It is not conceptualized as present or absent but rather as high or low. All societies have a need for certainty, security, rules and norms, however, some societies manifest a greater need than others. In societies with higher Uncertainty Avoidance the norms and rules governing behavior in general, and interpersonal relations in particular, are clearer and carry more authority.

Some correlates of high Uncertainty Avoidance identified by Hofstede include: loyalty to employers seen as a virtue, less achievement motivation, fear of failure, less risk taking, a greater generational gap, a tendency toward gerontocracy, hierarchical structures that are clear and respected, and a preference for clear requirements and instructions. Norms which correlate with Uncertainty Avoidance include: more showing of emotions, the avoidance of conflict and competition, achievement defined in terms of security rather than monetary or intellectual success, strong superegos, and a search for ultimate, absolute truths and values.

Masculinity is based by Hofstede on what he calls the universal human tendency to dichotomize sex roles and the nearly universal association of assertiveness with males and nurturance with females.

The term refers primarily to the predominant attitudes and values toward work in a given society. Societies which score high in Masculinity tend to view work as a central value of life. The goals of work are generally viewed in terms of personal advancement and increased earnings. High Masculinity

societies tend to define achievement in terms of recognition and wealth rather than life style. Achievement motivation is high. People like to work long hours and are attracted to larger organizations. Lastly, there are greater value differences between men and women in the same job and more sex role differentiation in general.

Societies which score low in Masculinity do not view work as so central to their lives. There is more emphasis on the rendering of services and on having a congenial physical and social environment. Achievement is defined more in terms of human contacts and life style. Achievement motivation is lower. People prefer shorter working hours to more pay and are attracted to smaller organizations where more rewarding human relationships can flourish. Lastly, there are smaller or no value differences between men and women in the same job and less sex role differentiation in general.

This last concept is what Kluckhohn and Strodtbeck (1961) call the relational value orientation and it refers to the basic principles by which human beings relate to others in a society. The major distinction is between societies which are characterized by individualism, in which the goals and welfare of the individual have priority over the group, and societies characterized by the principle of collectivism, in which the goals and welfare of the group take precedence over those of the individual. Generally, both principles are present in any given society. However, it is usually possible to ascertain which principle is dominant.

Hofstede's (1980) study found the most Power Distance in the Philippines and in Latin America. The high score for Latin America suggests that high Power Distance may also characterize Hispanic culture in the United States and the literature generally supports this supposition.

One aspect of high Power Distance is social stratification. Some authors have argued that Hispanics share the rigid class distinctions in effect in Latin America during the Spanish colonial period (e.g., Gonzalez, 1967; Grebler, Moore

& Guzman, 1970; MacGaffey & Barnett, 1962; Mintz, 1956; Wells, 1969). As a matter of fact, the theme of an acceptance of a stratified and hierarchical society is mentioned repeatedly in the anthropological literature for Mexican Americans (e.g., Clark, 1959; Madsen, 1973), Puerto Ricans (Mintz, 1966; Padilla, 1964; Rogler, 1972) and for Cubans (Rogg, 1974).

Descriptions of socialization patterns for Hispanics usually include a mention of the emphasis placed on respect and obedience and an acceptance of hierarchies (Burma, 1970; Kagan, 1977; Madsen, 1973; Mead, 1953; Mintz, 1966; Wells, 1969). In fact, Szapocznik, Scopetta, Aranalde and Kurtines (1978) report the preference of Cuban Americans for hierarchical lineality.

Power Distance is also assumed to be related to Hispanics' emphasis on respeto and dignidad in interpersonal relations. Respeto is the deference all human beings should have because of their existence and is closely tied to obedience toward authority and toward elders in a reciprocal dependence pattern of interrelations (Cardona Boyle, 1978; Diaz Guerrero, 1972; Diaz Guerrero & Peck, 1962). Respeto is intimately tied to dignidad where the latter refers to the innate worth and self-respect of each individual. These two concepts in interpersonal relations have been considered of central importance for Hispanics and in particular for Mexican Americans (e.g., Kagan, 1977; Madsen, 1973; Murillo, 1976; Romano, 1960), Puerto Ricans (Diaz-Royo, 1974; Lauria, 1964; Wells, 1969), and Cubar Americans (Fox, 1973).

Power Distance among Hispanics is, according to various authors, also exemplified by the use of honorific titles (Diaz-Royo, 1974; Romano, 1960), the distinctions between the uses of formal and informal pronouns (Diaz-Royo, 1974), and the stress on harmony and politeness among Mexican Americans (Burma, 1970; Madsen, 1973; Murillo, 1976), Puerto Ricans (Landy, 1959; Wagenheim, 1972) and Central and South American immigrants to the United States (Cohen, 1979).

In Hofstede's study, the highest scores on Uncertainty Avoidance were obtained in Greece, Japan and most Catholic countries, particularly Latin America. From this, we might assume that at least a moderately high level of Uncertainty Avoidance may characterize Hispanics. The literature, of course, does not address this topic directly but there are a few indications that are suggestive of Uncertainty Avoidance among Hispanics.

The close relationship between parents and children and the generally protective stance of Hispanic parents with regard to their children could be related to Uncertainty Avoidance. Kagan (1977), in his review of the literature, notes that Mexican American parents generally restrict their children more than Anglo parents. Socialization practices that encourage dependency have also been described for Puerto Ricans (Landy, 1959; Mintz, 1966; Wells, 1969) where obedience and conformity to rules is encouraged.

One other theme in the anthropological literature on Hispanics that may be related to Uncertainty Avoidance is the preference for minimizing risk taking and a fear of failure. The tendency among Mexican Americans to withdraw when they encounter obstacles has been frequently mentioned in the past (Burma, 1970; Heller, 1968; Madsen, 1973; Romano, 1960) together with a tendency on the part of Puerto Ricans to avoid direct confrontation and unnecessary risk-taking (Diaz-Royo, 1974; Mintz, 1966).

In Hofstede's study the highest Masculinity scores were found in Japan, with Austria, Venezuela, Italy, Switzerland, Great Britain and Mexico also being high. Again, the literature on Hispanics does not directly address the topic of attitudes toward work. There are some indications that Hispanics are high on Masculinity, but there are other indications that suggest a low score on Masculinity.

The literature suggests that work, while important, is not a central value among Hispanics. Mead (1953) and Saunders (1954) assert that Mexican

Americans respond to personal rather than impersonal incentives while Seda (1973) and Wolf (1956) describe the high value accorded leisure and idleness in Puerto Rican culture. Alum (1977) and Szalay, Ruiz, Strohl, Lopez and Turbyville (1978) have argued that for Hispanics, work is not an end in itself but rather a means to an end since the goal of work is to enjoy life. These results and statements suggest that Hispanics should score low on Masculinity as conceived by Hofstede (1980).

The question of achievement motivation is ambiguous and the evidence is contradictory. Some authors (e.g., Madsen, 1973; Sanders, Scholz & Kagan, 1976) suggest that Mexican Americans lack achievement motivation while others argue that different measures of achievement should be considered when evaluating Hispanics (e.g., Ramirez, 1976). Still other authors (e.g., Gil, 1976; Grebler, Moore & Guzman, 1970) show that the distribution of achievement motivation among Mexican Americans is very similar to that found among Anglo individuals.

Arguments for high levels of Masculinity would be centered on data that show that Hispanics prefer to be self-employed (Clark, 1959; Mead, 1953) and on the fact that there is a fairly high level of sex role differentiation in Hispanic and Latin American cultures (e.g., Fox, 1973; Turner, 1977; Pescatello, 1973), although in terms of sex role differentiation there are again some contradictory results that would argue for lower levels of Masculinity than those predicted from the earlier studies (e.g., Levine & West, 1979; Marotz, 1976).

The literature on Hispanic culture shows certain degree of consensus regarding relational orientations. Hispanics are usually described as emphasizing individuality rather than individualism and preferring a collectivist orientation. The notion of individuality assumes that each person is valuable because of a unique inner quality or worth that each individual possesses

(Gillin, 1965). Contrary to the assumption of potential equality with others, Hispanics are described as agreeing with an assumption of social inequality making individuals valuable precisely because of who they are. The importance of individuality for Hispanics has been documented by various authors among Mexican Americans (Grebler et al., 1970; Madsen, 1973; Saunders, 1954), Puerto Ricans (Diaz-Royo, 1974; Fitzpatrick, 1971; Saavedra de Roca, 1963; Wagenheim, 1972; Wells, 1969), and other groups of Hispanics (Alum, 1977; MacGaffey & Barnett, 1962; Szalay et al., 1978).

A collectivist orientation has also been frequently documented for Hispanics in terms of cooperativeness and gregariousness, group orientation, and personalism (Fitzpatrick, 1971; Alum, 1977; Padilla, 1964; Landy, 1959; Wells, 1969; Wolf, 1956; Mintz, 1966; Ross, 1977; Szapocznik, Scopetta, Aranaldo & Kurtines, 1978; Szalay et al., 1978). This orientation seems to be of such significance that Turner (1980) after reviewing the literature concludes that the major difference between Hispanics and Anglos is the individualism that characterizes the latter and the group-orientation that is central to the former.

Implications of such Differences for Supervisor Subordinate Relations

If Hispanics are indeed higher in Power Distance than Mainstream individuals they should be more tolerant than the Mainstream respondents of supervisory behaviors that are relatively authoritarian, and less concerned with participation in work-relevant decisions. If Hispanics are high in Uncertainty Avoidance they should prefer supervisors who provide clear rules, close supervision, and definite goals. If Hispanics are high in Collectivism they should prefer supervisors who reward team output rather than individual output. Since the Hispanic literature does not make strong and clear statements about Masculinity it is not possible to make any inferences concerning supervisory behaviors from that variable. However, if there are differences

between Hispanics and Mainstream individuals on the Masculinity-Femininity variable we would expect the low masculinity group to view work as a non-central value, to emphasize service to others, to see achievement as defined in terms of human contacts, and to prefer work in small, interpersonally warm organizations.

Anticipating test of some hypotheses with Navy recruits (see below) we formulated the following hypotheses:

Hypotheses

- 1. Hispanics will be higher than Mainstream recruits in Power Distance.
- 2. Hispanics will be higher than Mainstream recruits in Uncertainty Avoidance.
- 3. Hispanics will be higher than Mainstream recruits in Collectivism.
- 4. Hispanics will be lower than the Mainstream recruits in Masculinity.
- 5. Hispanics will tolerate non-participatory supervisors more than Mainstream recruits.
- 6. Hispanics will prefer supervisors who provide clear structure, rules, and goals, more than Mainstream recruits.
- 7. Hispanics-will prefer supervisors who provide group goals rather than individual goals.
- 8. Hispanics will view achievement in service to others terms, rather than in terms of wealth.

Method

Subjects

Seventy three Hispanic and 81 Mainstream recruits responded to the questionnaire while being classified into Navy jobs, as part of a larger study of the perceptions of the social environment by these recruits. In each of the three Navy recruit stations (Florida, California, and Illinois) when a Spanish-surmame recruit was to be classified, the classification

officer checked the recruit's self-identification on an application form on which "Hispanic" was one of the ways in which the applicant could describe himself. If the Spanish-surname recruit had selected the "Hispanic" self-identification label, he was asked to complete the questionnaire. At that time another recruit (with a non-Spanish surname) was randomly selected and given the same questionnaire. These other recruits are here referred to as "Mainstream" and will include both whites and blacks as well as Hispanics who did not identify themselves as "Hispanic."

Instrument

A questionnaire consisting of 159 items explored similarities and differences between Hispanics and Mainstream respondents. Most of the items were specially constructed to reflect the kinds of tendencies hypothesized by Hofstede (1980). In addition, many of Hofstede's recommended items were included. Furthermore, a number of supervisor-subordinate situations were constructed which included elements hypothesized to be relevant to the preferences of Hispanics and Mainstream individuals.

Results

Hypothesis 1 proposed that Hispanics would be higher than the Mainstream recruits on Power Distance. After item analysis 10 items that measured Power Distance in both ethnic samples were used (See appendix 1 for actual wording). One of these ("Employees lose respect for a supervisor who asks them for their advice before he makes a final decision") provided a significantly different distribution ($\chi^2(4)=17.1$, p<.002). Only 22.2% of the Mainstream recruits agreed with this statement, while 32.2% of the Hispanic agreed with it. Also, while 25.9% of the Mainstream strongly disagreed, only 5.5% of the Hispanics chose that response. The data from this item clearly and strongly supports the hypothesis. The remaining items do not reach statistical significance. However, of the 10 items nine are in the hypothesized direction. A binomial

test indicates that such a distribution would occur by chance only once in a thousand studies. In addition, the sum of the relevant items measuring Power Distance was compared across the ethnic Groups by \underline{t} -test. The test was significant (\underline{p} <.02). We can conclude then that the hypothesis is supported.

According to <u>Hypothesis 2</u>, Hispanics were expected to be higher than the Mainstream recruits in Uncertainty Avoidance. This hypothesis was tested with nine item-analyzed items. (See Appendix 2 for wording.) One of these reached significance in favor of the hypothesis, and seven out of nine provided data consistent with the hypothesis. For example, when asked if it was important to have a job that has an element of variety and adventure (an idea which is the opposite of Uncertainty Avoidance), 35% of the Mainstream but only 14% of the Hispanics indicated that it was of the utmost importance; furthermore, while 2% of the Mainstream indicated it had little or no importance, 7% of the Hispanics gave that response ($\chi^2(4)=10.0$, p<.04). A binomial test indicates that when seven out of nine items are in the same direction this result has a probability of p<.02. In addition, the sum of the relevant items measuring Uncertainty Avoidance was compared across ethnic groups by <u>t</u>-test, and the test was significant (p<.02). Thus the hypothesis is supported.

Hypothesis 3 stated that the Hispanics would be higher than the Mainstream recruits in Collectivism. An analysis of the percentages of the responses to the various categories tended to support this hypothesis since four of the five directly relevant items provided responses consistent with the hypothesis (See Appendix 3 for wording of items and an analysis of modal responses). There are also strong indications that this hypothesis is reasonable from other studies undertaken with similar samples of Hispanic and Mainstream recruits (Triandis, Ottati & Marín, Note 2; Triandis, Kashima, Lisansky & Marín, Note 3; Ross, Triandis, Chang & Marín, Note 4).

Hypothesis 4 stated that the Hispanics would be lower on Masculinity
than the Mainstream respondents. An analysis of the responses to the eight
relevant items (see Appendix 4 for precise wording) showed that the hypothesis

is confirmed since a binomial test showed that the actual distribution has a low probability (p<.035) of occurring by chance.

Hypothesis 5 which stated that the Hispanics would perceive nonparticipatory supervisors less negatively than the Mainstream recruits appears supported by the following three items:

- (1) In this item two men were described discussing their relationship with their supervisor, and the subjects were invited to agree with the views of one of these men. One man argued that "The superior, by being the superior, is expected to order and the subordinate is expected to obey without questioning. No exemption or personal consideration should be made by the superior." The other man argued that a superior should pay attention to the subordinate's personal life. Only 24% of the Mainstream sample and 46% of the Hispanics agreed with the views of the man quoted first. This difference is significant (x²(4)=7.72, p<.01).</p>
- (2) This item described three companies and asked subjects which company they would prefer to work for. Only 23% of the Mainstream sample wanted to work for Company B, while 36% of the Hispanics chose that company. The description of Company B was as follows: "In this company major decisions are taken after careful discussion between top union and top management leaders. Workers give their ideas to their union and this way their ideas sometimes make a difference in the decisions."

 The trend clearly suggests that the Hispanics showed more tolerance for this situation than the Mainstream (p<.10).
- (3) This item described four managers and asked the subjects to indicate under whom they would prefer to work. The modal response of the Mainstream subjects favored a consultative manager, while

the modal response of the Hispanics favored a manager who
"Usually makes his/her decisions promptly, but before going
ahead tries to explain them fully to his/her subordinates,
gives the reasons for the decisions and answers whatever questios
questions they may have." (p<.24)

The combined probability of these three independent events, by Stouffer's method (Mosteller & Bush, 1954) is p<.004. Thus the hypothesis is supported.

Hypothesis 6 stated that Hispanics would prefer supervisors who provide clear rules and goals more than Mainstream recruits. This hypothesis was examined by noting the relative preferences of the two samples for supervisors and jobs that require much traveling, variety, adventure vs security.

The two samples were not significantly different on that item, both preferring the former to the latter. We must remember, however, that the samples consist of Navy recruits, who by virtue of joining have indicated preferences for the former type job. Thus, it would appear that while Hispanics are higher in Uncertainty Avoidance, in the specific case of Navy recruits, this does not translate to preferences for security over adventure in viewing jobs.

Another item asked the subjects to choose between two instructors. One was described as explaining facts very clearly, drilling his students, and lecturing them a lot; the other was more vague but stimulating. Thirty-one percent of the Hispanics liked the former, while only 23% of the Mainstream did so. Both samples preferred the latter, but the relative preference was much clearer for the Mainstream 23-77 than the Hispanics 31-69 (p<.16). Nevertheless, there is not enough evidence in support for this hypothesis here and we must reject it.

Hypothesis 7 states that Hispanics will prefer collectivist work situations such as where a supervisor rewards the group rather than individuals.

This hypothesis was tested with two items, but was not supported.

Hypothesis 8 states that Hispanics will view achievement in terms of service to others, rather than material success. It was tested with three items. The first item described three kinds of companies. The first company recruited people who could get along with each other, paid relatively low wages, and emphasized good interpersonal relationships. Only 2% of the Mainstream liked that company, while 10% of the Hispanics did; the second company emphasized compatibility but not as much as the first company, and provided average wages. The Mainstream and Hispanic approval rates were 47% and 36% respectively. The last company emphasized the skill of the employees, paid no attention to compatibility, but had above average wages. The Mainstream and Hispanic percentages were 51 and 54 respectively. Thus, both samples appear to be high in masculinity—emphasize wages over service to others.

The next item described three jobs. The first job was said to include several of the subject's friends, but did not pay well; the second had two of the subject's acquaintances and paid an average wage; and the third paid better than the average but it was said that the subject did not know anyone in that company. In choosing among these three jobs the Mainstream and Hispanic samples overwhelmingly chose the latter job. Thus, again we find the Hispanics just as wage-oriented as the Mainstream respondents and willing to sacrifice a friendly work environment for money.

The third item contrasted two organizations. The first was a small one with 50 employees all of whom know each other, which does not pay as well as the average, while the second was a large organization of several thousand employees paying better than average. Again, both samples overwhelmingly chose pay over a friendly environment (the percentages were 69 and 76 for the Mainstream and Hispanics respectively). We must conclude then that there is no support for this hypothesis.

Power Distance Index of our Samples Compared with Hofstede's

For Power Distance we had the exact items that were needed to compute Hofstede's Power Distance Index. For our samples, the three relevant items yielded a score of 117 for the Mainstream respondents and 114 for the Hispanics. Hofstede's (1980) scores, as reported in his Table on p. 104, range from 11 (Austria) to 94 (Philippines). Thus, our scores of approximately 115 are much higher than any of the scores obtained in any of the 40 countries in Hofstede's survey. Of course, we must remember that Hofstede's sample was composed of individuals working in industry, and included several individuals who were much older than our Navy recruits. Thus, here we have striking evidence that within a society such as the U.S., whose power distance score in Hofstede's data was only 40, there are many subcultures, some with scores as high as 115.

A Military subculture is obviously much more of a Power Distance culture than the industrial subculture. This can be seen by looking analytically at the three items used by Hofstede to construct his index. One item asked whether in the subject's experience people in their organization are afraid to disagree with their supervisors (Hofstede used the term manager, we used supervisor since that could be applied to the Navy). The options were: very frequently, frequently, sometimes, seldom and very seldom. The mean of our subjects was around 2.3, i.e. very close to the <u>frequently</u> response. The mean of Hofstede's subjects ranged from 2.5 (which is between frequently and sometimes) to 3.6 which is close to seldom. The 2.5 (from Greece) is the closest to our data. The 3.6 (from Austria) is obviously very different. The rest of the world is in-between. One can see similar patterns of data for the other two Hofstede items.

Thus a military culture apparently is outside the range of the world cultures (as sampled within a multinational corporation) in the kinds of responses one obtains on Power Distance.

Turning to Uncertainty Avoidance we have in our questionnaire two items for which Hofstede has provided world-wide information. The means of our samples on those items fall in the <u>low-middle</u> range. Since the U.S. is low on this variable this suggests that U.S. Hispanics are closer to the U.S. mean than to the means of Hispanic countries. For example, on the item "Competition between employees usually does more harm than good" high Uncertainty Avoidance countries like Portugal (with a score of 2.31) tend to agree, while low Uncertainty Avoidance countries such as New Zealand (with a score of 3.41) tend to disagree. The U.S. mean is at 3.29, while our Mainstream Navy sample mean is 3.00 and our Hispanic sample mean is 2.82. On this dimension the Navy sample is high relative to U.S. culture, but lower than many Latin American countries.

On the Individualism-Collectivism dimension, the range on one of the questions for which Hofstede provides complete data is from 3.89 (Brazil and Chile high on collectivism) to 3.16 (Great Britain high on individualism). The U.S. mean is 3.22, which is exactly the mean of our Hispanic sample, while on that question our Mainstream sample was slightly more collectivist at 3.27. Thus, we must conclude that both our samples are quite individualistic, relative to the rest of the world, and the military culture has little relevance to this dimension.

On the Masculinity dimension our samples were relatively high. For example, one of the items ranged from 2.36 (Colombia, on the high side of Masculinity in Hofstede's data) to 3.42 (Norway, on the low side). Our Hispanic sample was at 2.55 while our Mainstream sample had a mean of 2.69. On this item, then, both samples are high relative to the world data. Contrary to the general trend for most masculinity items, where the Mainstream responses are higher than the Hispanic, on this item the Hispanics are higher than the Mainstream and approach the Colombians. This dimension, again, appears more relevant to military culture than the Individualism dimension. Ferhaps it

is the case that those who are higher on Masculinity are more attracted to the military than those low on it.

We can conclude, then, that Navy recruits, relative to Hofstede's industrial samples, tend to be extremely high on Power Distance, high on Uncertainty Avoidance and Masculinity, and close to the U.S. mean on Individualism.

Figure 1 can help visualize the position of our samples relative to the Hofstede data.

Relationships between Hofstede's Variables and Acculturation and Biculturalism

After the item analysis we constructed variables measuring Power Distance, Uncertainty Avoidance, and Masculinity with 10, 9, and 8 items respectively. The sum of the responses to the several items measuring each variable were correlated with the indices of acculturation and biculturalism described by Triandis, Hui, Lisansky and Marín (Note 5). The correlations which reached significance indicated that acculturation is negatively related to Power Distance [acculturation index 1 (generational family history) correlated r=-.22, p<.03; index 2 (ideal ethnicity for social interactions)

r=-.28, p<.01]. Thus the more acculturated the Hispanic Navy recruits the more they perceived the expression of disagreement with the supervisors as frequent, i.e. the lower their Power Distance. Since the Mainstream Power Distance is lower than that of Hispanics this indicates that acculturation has the effect of changing Hispanics in the direction of the Mainstream view-point on Power Distance.

For Biculturalism there was a relationship with Uncertainty Avoidance. Specifically, the second biculturalism index (preferred ethnicity for social interactions) correlated (r=-.25, p<.02) with Uncertainty Avoidance, indicating that the more bicultural Kispanics showed less Uncertainty Avoidance. Again, given the finding that the Hispanic sample is higher than the Mainstream sample in Uncertainty Avoidance, this indicates that biculturalism moves the Hispanics in the direction of the Mainstream on Uncertainty Avoidance.

Incidentally, there was also a correlation between the Inkeles Modernity measure and Uncertainty Avoidance (r=-.22, p<.03) indicating that the more modern Hispanics show less Uncertainty Avoidance.

All of these results are consistent with the idea that the more acculturated are the Hispanics the more they resemble the Mainstream respondents.

Discussion

The hypotheses derived from Hofstede's work were generally supported. The Hispanics were higher than the Mainstream recruits in Power Distance, Uncertainty Avoidance, Collectivism, and lower on Masculinity. The data provided strong support for the hypotheses concerning Power Distance and Uncertainty Avoidance, given the pattern of correlations of these indices with acculturation and biculturalism. We can be less certain about the other two variables.

However, these results did not generalize very much when the implications of such differences for preferences for certain supervisor—subordinate situations were examined. While we did find support for the expected differences in Power Distance, with the Hispanics tolerating a non-participatory, more authoritarian supervisor more than the Mainstream respondents, there was not enough evidence to support the corresponding hypotheses concerning Uncertainty Avoidance, Collectivism and Masculinity.

Additional data collected at the time the supervisor perceptions were obtained suggested that the Hispanic and Mainstream samples are extremely similar. Only minor, and statistically non-significant trends were detected, such as the Hispanic preference for high Consideration-low Initiating Structure supervisors rather than low Consideration-high Initiating Structure supervisors, with the Mainstream showing the opposite pattern of preference.

These data are again consistent with the generalization that the Navy is recruiting Hispanics who are quite similar to the Mainstream recruits. This conclusion has been stated in the other studies by Triandis, Ottati, and Marin

(Note 2), Ross, Triandis, Chang, and Marin (Note 4), Hui, Triandis, and Chang (Note 6), and the study of values by Triandis, Kashima, Lisansky, and Marin (Note 3.) based on data collected in the same way but from a different sample. The present study adds a significant perspective by linking the Power Distance scores of the Navy samples with Hofstede's world-wide sample of employees of a multinational corporation. We find that the recruits are much higher in Power Distance than industrial employees anywhere in the world. Thus, the "military culture" is distinct from the "industrial culture" on the Power Distance variable. Moreover, the Navy recruits are quite high, relative to the world, on Uncertainty Avoidance and Masculinity. On the other hand, they are very close to the U.S. means on Individualism. Thus, it appears that there is a "military culture", high on Power Distance, Uncertainty Avoidance and Masculinity, which attracts and selectively recruits individuals who are high on those dimensions relative to the U.S. means. On the other hand, the Navy samples are very similar to the U.S. means on Individualism, suggesting that there is no selectivity in Navy recruitment on this dimension.

Reference Notes

- Lisansky, J. Interpersonal relations among Hispanics in the United States: A content analysis of the social science literature.
 Technical Report No. 3, ONR Contract, Department of Psychology, University of Illinois, Champaign, IL., 1982.
- Triandis, H. C., Ottati, V. C., & Marin, G. Achievement motives of Hispanic and Mainstream Navy recruits. Technical Report No. 5, ONR Contract. Department of Psychology, University of Illinois, Champaign, IL., 1982.
- 3. Triandis, H. C., Kashima, Y., Lisansky, J., & Marin, G. Self-concepts and values among Hispanic and Mainstream Navy recruits. Technical Report No. 7, ONR Contract. Department of Psychology, University of Illinois, Champaign, IL., 1982.
- 4. Ross, W., Triandis, H. C., Chang, B. H., & Marin, G. Work values of Hispanic and Mainstream Navy recruits. Technical Report No. 8, ONR Contract, University of Illinois, Champaign, IL., 1982.
- Triandis, H. C., Hui, C. H., Lisansky, J., & Marin, G. Acculturation and biculturalism among Hispanic Navy recruits. Technical Report No.
 ONR Contract. Department of Psychology, University of Illinois, Champaign, IL., 1982.
- 6. Hui, C. H., Triandis, H. C., Chang, B. Locus of control among Mainstream and Hispanic Navy recruits: A methodological and substantive study.

 Technical Report No. ONR-9, ONR Contract. Department of Psychology,

 University of Illinois, Champaign, IL., 1982.

References

- Alum, R. A., & Manteiga, F. P. Cuban and American values: A synoptic comparison. In <u>Hispanic subcultural values</u>: <u>Similarities and differences</u>.

 Mosaic (ERIC ED 144466), 1977.
- Burma, J. H. Mexican-Americans in the United States: A reader.

 Cambridge, Mass.: Schenkman, 1970.
- Cardona Boyle, N. Supervision in the delivery of culturally compatible services. In Chicano Training Center (Ed.) Perspectives on the delivery of bicultural social services. Monograph No. 4, Chicano Training Center, Houston, Texas, 1978.
- Clark, M. Health in the Mexican-American culture: A community study.

 Berkeley: University of California Press, 1959.
- Cohen, L. <u>Culture</u>, disease, and stress among <u>Latino</u> immigrants. Washington:

 Research Institute on Immigration and Ethnic Studies, Smithsonian

 Institute, 1979.
- Diaz Guerrero, R. Dos patrones culturales medulares y la difusion de valores a traves de su frontera. En R Diaz Guerrero Estudios de psicologia de mexicano. Mexico: Trillas, 1972.
- Diaz-Guerrero, R., & Peck, R. F. Respeto y posicion social en dos culturas.

 Anuario de Psicologia, 1962, 1, 37-63.
- Diaz-Royo, A. T. The enculturation process of Puerto Rican highland children.

 Ph.D. dissertation. Ann Arbor, Mich.: University Microfilms, 1974.
- Fitzpatrick, J. P. Puerto Rican Americans (the meaning of migration to the mainland). In M. M. Gordon (Ed.), Ethnic Groups in American Life Series.

 Englewood Cliffs, N.J.: Prentice-Hall, 1971.
- Fox, G. E. Honor, shame and women's liberation in Cuba: Views of workingclass emigré men. In A. Pescatello (Ed.), <u>Female and male in Latin</u> <u>America</u>. Pittsburgh: University of Pittsburgh Press, 1973.

- Gil, V. E. The personal adjustment and acculturation of Cuban immigrants in Los Angeles. Ph.D. dissertation. Ann Arbor, Mich.: University Microfilms, 1976.
- Gillin, J. Ethos components in modern Latin American culture. In D. Heath & R. Adams (Eds.), Contemporary cultures and societies of Latin America.

 New York: Random House, 1965.
- Gonzalez, N. L. The Spanish-Americans of New Mexico: A heritage of pride.

 Albuquerque: University of New Mexico Press, 1967.
- Grebler, L., Moore, J. W., & Guzman, R. C. The Mexican-American people:

 The nation's second largest minority. New York: Free Press, 1970.
- Heller, C. S. Mexican American youth: Forgotten youth at the crossroad.

 New York: Random House, 1968.
- Hofstede, G. <u>Culture's consequences</u>: <u>International differences in</u>
 work-related values. Beverly Hills, Calif.: Sage, 1980.
- Kagan, S. Social motives and behaviors of Mexican-Americans and Anglo children. In J. L. Martinez (Ed.), Chicano psychology. New York:

 Academic, 1977.
- Kluckhohn, F. R., & Strodtbeck, F. L. <u>Variations in value orientations</u>.
 Westport, Conn.: Greenwood, 1961.
- Landy, D. Tropical childhood: Cultural transmission and learning in a rural Puerto Rican village. Chapel Hill: University of North Carolina Press, 1959.
- Lauria, A. Respeto, Relajo and Interpersonal Relations in Puerto Rico.

 Anthropological Quarterly 1964, 37, 53-67.
- Levine, R. V., & West, L. Attitudes toward women in the United States and Brasil. <u>Journal of Social Psychology</u>, 1979, 108, 265-266.
- MacGaffey, W., & Barnett, C. R. Cuba: Its people, its society, its culture.

 New Haven: HRAF Press, 1962.

- Madsen, W. Mexican-Americans of south Texas. New York: Holt, Rienhart & Winston, 1973.
- Marotz, R. Sex differentiation and inequality: A Mexican-United States comparison of parental aspirations for daughters. <u>Journal of Comparative Family Studies</u>, 1976, 7, 41-53.
- Mead, M. Cultural patterns and technical change. Paris: United Nations Educational, Scientific and Cultural Organizations, 1953.
- Mintz, S. W. Cafiamelar: The subculture of a rural sugar plantation proletariat.

 In J. Steward et al., (Eds.), The people of Puerto Rico. Urbana: University of Illinois, 1956.
- Mintz, S. W. Puerto Rico; an essay in the definition of a national culture.

 In Status of Puerto Rico: Selected background studies, for the U.S.
 P.R. Commission on the status of P.R. Washington, D.C.: U.S. Government Printing Office, 1966.
- Murillo, N. The Mexican-American family. In C. A. Hernández, M. J. Haug & N. N. Wagner (Eds.), Chicanos: Social and psychological perspectives.

 St. Louis: Mosby, 1976.
- Padilla, E. Up f.om Puerto Rico. New York: Columbia University Press, 1964.
- Pescatello, A. Female and male in Latin America. Pittsburgh: University of Pittsburgh Press, 1973.
- Ramirez III, M. Cognitive styles and cultural democracy in education. In C. A. Hernandez et al. (Eds.) Chicanos: Social and psychological perspectives. St. Louis: Mcsby, 1976.
- Rogg, E. The assimilation of Cuban exiles. New York: Aberdeen, 1974.
- Rogler, L. H. Migrant in the city: The life of a Puerto Rican action group.

 New York: Basic Books, 1972.
- Romano, O. I. Donship in a Mexican-American community in Texas. American Anthropologist, 1960, 62, 966-976.

- Ross, C. S. Value conflicts of mainland Puerto Rican children. In <u>Hispanic</u>

 <u>sub-cultural values</u>: <u>Similarities and differences</u>. Mosaic (ERIC ED

 144466), 1977.
- Saavedra de Roca, A. Algunos valores prevalecientes en la sociedad puertorriqueña. Revista de Ciencias Sociales, 1963, 7, 1-2.
- Sanders, M., Scholz, M. P., & Kagan, S. Three social motives and field independence-dependence in Anglo American and Mexican American children.

 Journal of Cross-Cultural Psychology, 1976, 7, 451-460.
- Saunders, L. Cultural differences and medical care of the Spanish speaking people of the Southwest. New York: Russell Sage Foundation, 1954.
- Seda, E. Social change and personality in a Puerto Rican agrarian reform community. Evanston: Northwestern University Press, 1973.
- Szalay, L., Ruiz, P., Strohl, J., Lopez, R., & Turbyville, L. The Hispanic
 American cultural frame of reference. Washington, D.C.: Institute of

 Comparative Social & Cultural Studies, Inc., 1978.
- Szapocznik, J., Scopetta, M. A., Aranalde, M., & Kurtines, W. Cuban value structure: Treatment implications. <u>Journal of Consulting and Clinical Psychology</u>, 1978, 46, 961-970.
- Turner, J. Estereotipos sexuales: Una comparación de los estudiantes colombianos y canadienses. Revista Latinoamericana de Psicologia, 1977, 9, 57-74.
- Turner, S. P. A model to predict retention and attrition of Hispanic-Americans in the Navy. Arlington, Va.: Office of Naval Research, 1980.
- Wagenheim, K. Puerto Rico, a profile. New York: Praeger, 1972.
- Wells, H. The modernization of Puerto Rico. Cambridge, Mass.: Harvard University Press, 1969.
- Wolf, E. R. San José: Subcultures of a "traditional" coffee municipality. In J. Steward et al. (Eds.), The people of Puerto Rico. Urbana: University of Illinois Press, 1956.

Appendix 1

Items Related to Power Distance in Item Analysis

The recruits were presented with the following situation, and were asked to respond to each of the items shown below it on this scale:

(A) Very frequently, (B) Frequently, (C) Sometimes, (D) Seldom and (E) Almost Never

You must have some experience with large organizations--corporations, military organizations, or universities. In your experience how frequently do the following events take place in the organizations you know something about? Fill in the appropriate letter on your answer sheet.

		Modal Resp Mainstream by Hi	
1.	Employees are afraid to express disagreement with their supervisors.	B+	C+
2.	High level people get involved in details of the job that should be left to lower level people.	с	c .
3.	Some groups of employees look down on other groups of employees.	с	В
4.	Employees lose respect for a supervisor who asks them for their advice before he makes a final decision.	D <u>p</u> <.002	С
5.	Employees in industry participate in decisions taken by management. (correlates negatively)	В	В

In the next section of the questionnaire the respondents read:

- 6. The descriptions below apply to four different types of managers. First, please read through the descriptions:
 - Manager A Usually makes decisions promptly and communicates them to subordinates clearly and firmly. Expects them to carry out the decisions loyally and without raising difficulties.
 - Manager B Usually makes decisions promptly, but before going ahead, tries to explain them fully to subordinates. Gives them the reasons for the decisions and answers whatever questions they may have.
 - Manager C Usually consults with subordinates before reaching decisions. Listens to their advice, considers it, and then announces the decision. Expects all to work loyally to implement the decision whether or not it is in accordance with the advice they gave.
 - Manager D Usually calls a meeting of subordinates when there is an important decision to be made. Puts the problem before the group and invites discussion. Accepts the majority viewpoint as the decision.

Appendix 1 (cont'd)

Now for the above types of managers, please select the one to whom your own superior most closely corresponds.

(Modal response for both samples: A)

The recruits were then asked to agree or disagree on a 5-point scale, ranging from A (strongly agree) to E (strongly disagree) with the following statements:

- A company or organization's rules should not be broken--even when the employee thinks it is in the organization's best interests.
 (Modal response of Mainstream: B, of Hispanic B+)
- 8. How frequently, in your work environment, are subordinates afraid to express disagreement with their superiors?
 (Modal response of Mainstream Sometimes; of Hispanics Frequently.)

You have a choice of one of four jobs. Rate these jobs giving:

- an A to the one you think would be excellent for you
- a B to the one you think would be good for you.
- a C to the one you think would be O.K. for you
- a D to the one you think would be poor for you, and
- an E to the one you would refuse to do.
- 9. Job 1. In this job people are required to work under strict rules and regulations. Individual accountability is emphasized.

(Modal response of Mainstream: C; Hispanics B) (p<.03)

10. Job 2. In this job a team of several individuals has to perform according to strict rules and regulations. Team accountability is emphasized.

(Modal response of Mainstream C; Hispanics C+)

Appendix 2

Items Related to <u>Uncertainty Avoidance</u> in Item Analysis (See Appendix 1 for details of format of questions)

		Modal Responses	
		Mainstream	Hispanics
1.	People are not sure what their duties and responsibilities really are.	С	С
2.	An organization has major responsibility for the health and welfare of the people who work in it, and also for their families. (Scale: A= Strongly Agree, B= Agree, C= Undecided)	В	В
3.	Competition between employees usually does more harm than good.	С	В
4.	How often do you feel nervous and tense at work?	c	C+
In	ase think of an ideal jobdisregarding your present choosing an ideal job, how important would it be to y Scale that was used: (A) of Utmost Importance (B) Very Important (C) of Moderate Importance (D) of Little Importance (E) of Very Little or No Importance	you to:	
5.	Have an element of variety and adventure in the job (correlates negatively with Uncertainty Avoidance)	B+ <u>p</u> <.04	В
6.	Be consulted by your direct supervisors in his decisions.	В	B+
7.	Work in a well-defined job situation where the requirements are clear.	B	В
8.	A large corporation is generally a more desirable place to work than a small company (Strongly Agree=A) B	B+
9,	In this job people are required to work under strict rules and regulations. Individual accountability is emphasized. (This item correlates with both Fower Distance and Uncertainty Avoidance.)	C <u>p</u> <.03	``.

Appendix 3 Items Related to <u>Individualism-Collectivism</u>

(See Appendix 1 for format of questions)

Modal Responses

	<u> </u>	lainstream	Hispanics
1.	An organization has major responsibility for the health and welfare of the people who work in it, and also for their families. (Collectivism item, but also relates to Uncertainty Avoidance in item analysis)	В	В
2.	With reference to ideal job - Have sufficient time left for your personal or family life. (Individualism item)	A	В
3.	Have considerable freedom to adopt your own approach to the job (Individualism).	В	В
4.	Live in area desirable to you and your family (Individualism).	В	B+
5.	In this job you make your own rules, as you go along. There is little control, self-reliance is stressed. Individual accountability is emphasized (Individualis	C+	c

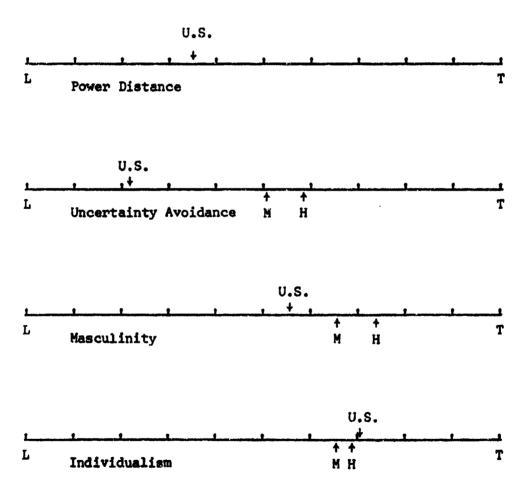
Appendix 4

Items Related to Masculinity

(See Appendix 1 for format of questions)

		Modal Responses	
		Mainstream	Hispanics
1.	Have challenging tasks to do, from which you get a personal sense of accomplishment.	В	В
2.	(Negatively) Have good physical working conditions (good ventilation and lighting and adequate work space)	В	В
з.	(Negatively) Have secure employment.	В	A
4.	Make a real contribution to the success of your company or organization.	В	В
5.	Have an opportunity for higher earnings.	В	A
6.	Have an opportunity for advancement to higher level jobs.	В	A .
7,	(Negatively) Have an opportunity for helping other people.	В	B +
8.	(Negatively) Quite a few employees have an inherited dislike of work and will avoid it if they can. (B=agree)	d B-	В

Figure 1: Location of the Mainstream (M) and Hispanic (H) Recruit Mean
Responses in Relation to Hofstede's World Wide Data Means, with
the World's Lowest Mean (L) Scaled so as to be the same Distance
from the World's Top (T) Mean on Four Dimensions. The U.S.
mean in Hofstede's study is also shown.



DISTRIBUTION LIST

List 1 (Mandatory)

(12 copies)

Defense Technical Information Center ATTN: DTIC DDA-2 Selection and Preliminary Cataloging Sec. Cameron Station Alexandria, VA 22314

Library of Congress Science and Technology Division Washington, DC 20540

Office of Naval Research
Code 4420E (3 copies)
800 N. Quincy St.
Arlington, VA 22217

Naval Research Laboratory Code 2627 (6 copies) Washington, DC 20375

Office of Naval Research Director, Technology Programs Code 200 800 N. Quincy St. Arlington, VA 22217

Office of Naval Research Code 440 800 N. Quincy St. Arlington, VA 22217

Office of Naval Research Code 442PT 800 N. Quincy St. Arlington, VA 22217

Office of Naval Research Code 442EP 800 N. Quincy St. Arlington, VA 22217

List 2 ONR Field

ONR Western Regional Office 1030 E. Green St. Pasadena, CA 91106

Psychologist ONR Western Regional Office 1030 E. Green St. Pasadena, CA 91106

ONR Regional Office 536 S. Clark St. Chicago, IL 60605

Psychologist
ONR Regional Office
536 S. Clark St.
Chicago. IL 60605

Psychologist ONR Eastern Regional Office 495 Summer St. Boston, MA 02210

ONR Eastern/Central Regional Office 495 Summer St. Boston, MA 02210

ONR MISC.

LCOL Amilcar Vasquez
Marine Corps
Dept. of the Navy
Assistant of DASN(EO)
The Pentagon, Room 5D824
Washington, DC 20350

CAPT. A. T. Eyler
OP-150
Department of the Navy
Washington Navy Yard, Bldg. #212
Washington, DC 20370

CDR Ken Johnson
Department of the Navy
Navy Recruiting Command
Room 217
Ballston Tower #3, Arlington V
222

Dr. Al Lau Navy Personnel Research and Development Center San Diego, CA 92152

List 3 OPNAV

Deputy Chief of Naval Operations (Manpower, Personnel, and Training) Head, Research, Development, and Studies Branch (Op-115 1812 Arlington Annex Washington, DC 20350

Director Civilian Personnel Division (OP-14) Department of the Navy 1803 Arlington Annex Washington, DC 20350

Deputy Chief of Naval Operations (Manpower, Personnel, and Training) Director, Human Resource Management Plans and Policy Branch (Op-150) Department of the Navy Washington, DC 20350

Chief of Naval Operations
Head, Manpower, Personnel, Training
and Reserves Team (Op-964D)
The Pentagon, 4A478
Washington, DC 20350

Chief of Naval Operations
Assistant, Personnel Logistics
Planning (Op-987H)
The Pentagon, 5D772
Washington, DC 20350

List 4 (NAVMAT)

Program Administrator for Manpower, Personnel, and Training MAT-0722 (A. Rubenstein) 800 N. Quincy St. Arlington, VA 22217

Naval Material Command
Management Training Center
NAVMAT 09M32
Jefferson Plaza, Bldg. #2, Rm. 150
1421 Jefferson Davis Highway
Arlington, VA 20360

Naval Material Command MAT-00K (J. W. Tweeddale) OASN(SNL) Room 236 Crystal Plaza #5

Naval Material Command MAT-OOKB OASN(SNL) Room 236 Crystal Plaza #5 Washington, DC 20360

Naval Material Command MAT-03 (J. E. Colvard) Room 236 Crystal Plaza #5 Washington, DC 20360

List 4 (NPRDC)

Commanding Officer
Naval Personnel R&D Center
San Diego, CA 92152

(3 copies)

Naval Personnel R&D Center Dr. Robert Penn San Diego, CA 92152

Dr. Ed Aiken Naval Personnel R&D Center San Diego, CA 92152

Navy Personnel R&D Center Washington Liaison Office Building 200, 2N Washington Navy Yard Washington, DC 20374

List 5 BUMED

Commanding Officer
Naval Health Research Center
San Diego, CA 92152

CDR William S. Maynard
Psychology Department
Naval Regional Medical Center
San Diego, CA 92134

Naval Submarine Medical Research Laboratory Naval Submarine Base New London, Box 900 Groton, CT 06349

Director, Medical Service Corps Bureau of Medicine and Surgery Code 23 Department of the Navy Washington, DC 20372

Naval Aerospace Medical Research Lab Naval Air Station Pensacola, FL 32508

Program Manager for Human Performance (Code 44) Naval Medical R&D Command National Naval Medical Center Bethesda, MD 20014

Navy Medical R&D Command ATTN: Code 44 National Naval Medical Center Bethesda, MD 20014

Naval Academy & Naval Postgrad. School

Naval Postgraduate School
ATTN: Dr. Richard S. Elster
(Code 012)
Department of Administrative Sciences
Monterey, CA 93940

Naval Postgraduate School
ATTN: Prof. John Senger
Operations Research & Administrative
Science
Monterey, CA 93940

Superintendent Naval Postgraduate School Code 1424 Monterey, CA 93940

Naval Postgraduate School ATTN: Dr. James Arima Code 54-Aa Monterey, CA 93940

Naval Postgraduate School ATTN: Dr. Richard A. McGonigal Code 54 Monterey, CA 93940

U.S. Naval Academy ATTN: CDR J. M. McGrath Department of Leadership & Law Annapolis, MD 21402

Prof. Carson K. Eoyang Naval Postgraduate School Code 54EG Department of Admin. Sciences Monterey, CA 93940

Superintendent
ATTN: Director of Research
Naval Academy, U.S.
Annapolis, MD 21402

List 7 HRM

Officer in Charge Human Resource Management Detachment Naval Air Station Alameda, CA 94591

Officer in Charge Human Resource Management Detachment Naval Submarine Base New London P.O. Box 81 Groton, CT 06340

Officer in Charge Human Resource Management Div. Naval Air Station Mayport, FL 32228

Commanding Officer Human Resource Management Center Pearl Harbor, KI 96860

Commander in Chief Human Resource Management Div. U.S. Pacific Fleet Pearl Harbor, HI 96860

Officer in Charge Human Resource Management Detachment Naval Base Charleston, SC 29408

Commanding Officer
Human Resource Management School
Naval Air Station Memphis
Millington, TN 38054

Human Resource Management School Naval Air Station Memphis (96) Millington, TN 38054 Commanding Officer
Human Resource Management Center
1300 Wilson Blvd.
Arlington, VA 22209

Commanding Officer
Human Resource Management Center
5621-23 Tidewater Dr.
Norfolk, VA 23511

Commander in Chief Human Resource Management Div. U.S. Atlantic Fleet Norfolk. VA 23511

Officer in Charge Human Resource Management Detachment Naval Air Station Whidbey Island Oak Harbor, WA 98278

Commanding Officer Human Resource Management Center Box 23 FPO New York 09510

Commander in Chief Human Resource Management Div. U.S. Naval Force Europe FPO New York 09510

Officer in Charge Human Resource Management Detachment Box 60 FPO San Francisco 96651

Officer in Charge Human Resource Management Detachment COMNAVFORJAPAN FPO Scattle 98762

List 8 Navy Miscellaneous

(2 copies)

Naval Military Personnel Command HRM Department (NMPC-6) Washington, DC 20350

Naval Training Analysis and Evaluation Group Orlando, FL 32813

Commanding Officer
ATTN: TIC, Bldg. 2068
Naval Training Equipment Center
Orlando, FL 32813

Chief of Naval Education and Training (N-5) Director, Research Development, Test and Evaluation Naval Air Station Pensacola, FL 32508

Chief of Naval Technical Training ATTN: Dr. Norman Kerr, Code 017 NAS Memphis (75) Millington, TN 38054

Navy Recruiting Command Head, Research and Analysis Branch Code 434, Room 8001 801 North Randolph St. Arlington, VA 22203

Commanding Officer
USS Carl Vinson (CVN-70)
Newport News Shipbuilding &
Drydock Company
Newport News, VA 23607

Naval Weapons Center Code 094 (C. Erickson) China Lake, CA 93555

Jesse Orlansky
Institute for Defense Analyses
1801 N. Beauregard St.
Alexandria, VA 22311

List 9 USMC

Headquarters, U.S. Marine Corps Code MPI-20 Washington, DC 20380

Headquarters, U.S. Marine Corps. ATTN: Dr. A. L. Slafkosky Code RD-1 Washington, DC 20380

Education Advisor Education Center (E031) MCDEC Quantico, VA 22134

Commanding Officer Education Center (E031) MCDEC Quantico, VA 22134

Commanding Officer
U.S. Marine Corps
Command and Staff College
Quantico, VA 22134

List 10 DARPA

(3 copies)

Defense Advanced Research Proj. Agency Director, Cybernetics Tech. Office 1400 Wilson Blvd., Room 625 Arlington, VA 22209

Mr. Michael A. Daniels
Int'l Public Folicy Research Corp.
6845 Elm St., Suite 212
McLean, VA 22101

Dr. A. F. K. Organski Center for Political Studies Institute for Social Research University of Michigan Ann Arbor, MI 48106

List 11 Other Federal Government

Dr. Douglas Hunter
Defense Intelligence School
Washington, DC 20374

Dr. Brian Usilaner GAO Washington, DC 20548

Nat'l Institute of Education ATTN: Dr. Frits Mulhauser EOLC/SMO 1200 19th St., N.W. Washington, DC 20208

Nat'l Institute of Mental Health Div. of Extramural Research Programs 5600 Fishers Lame Rockville, MD 20852

Nat'l Institute of Mental Health Minority Group MentalH ealth Programs Room 7 - 102 5600 Fishers Lane Rockville, MD 20852

Office of Personnel Management
Office of Planning and Evaluation
Research Management Div.
1900 E Street, N.W.
Washington, DC 20415

Office of Personnel Management ATTN: Ms. Carolyn Burstein 1900 E Street, NW. Washington, DC 20415

Office of Personnel Management ATTN: Mr. Jeff Kane Personnel R&D Center 1900 E Street, N.W. Washington, DC 20415

Chief, Psychological Research Branch ATTN: Mr. Richard Lanterman U.S. Coast Guard (G-P-1/2/TP42) Washington, DC 20593

Social and Developmental Psychology
Program
National Science Foundation
Washington, DC 20550

List 13 Air Force

Air University Library LSE 76-443 Maxwell AFB, AL 36112

Col. John W. Williams, Jr.
Head, Dept. of Behavioral Science
and Leadership
U.S. Air Force Academy, CO 80840

Maj. Robert Gregory
USAFA/DFBL
U.S. Air Force Academy, CO 80840

AFOSR/NL (Dr. Fregly)
Building 410
Bolling AFB
Washington, DC 20332

Dept. of the Air Force Maj. Bossart HQUSAF/MPXHL The Pentagon Washington, DC 20330

Technical Director AFHRL/MO(T) Brooks AFB San Antonio, TX 78235

AFMPC/MPCYPR Randolph AFB, TX 78150

List 12 Army

Headquarters, FORSCOM ATTN: AFPR-HR Ft. McPherson, GA 30330

Army Research Institute
Field Unit - Leavenworth
P.O. Box 3122
Fort Leavenworth, KB 66027

Technical Director
Army Research Institute
5001 Eisenhower Avenue
Alexandria, VA 22338

Director
Systems Research Laboratory
5001 Eisenhower Ave.
Alexandria, VA 22333

Director
Army Research Institute
Training Research Laboratory
5001 Eisenhower Ave.
Alexandria, VA 22333

Dr. T. O. Jacobs
Code PERI-IN
Army Research Institute
5001 Eisenhower Avenue
Alexandria, VA 22333

Col. Howard Prince, Head
Department of Behavior
Science and Leadership
U.S. Military Academy,
New York 10996

the state of the state of

List 15 Current Contractors

Dr. Frank J. Landy
Department of Psychology
The Pennsylvania State University
417 Bruce V. Moore Bldg.
University Park, PA 16802

Dr. Bibb Latane Department of Psychology The Ohio State University 404B West 17th St. Columbus, OH 43210

Dr. Edward E. Lawler University of Southern California Graduate School of Business Admin. Los Angeles, CA 90007

Dr. Edwin A. Locke College of Business & Management University of Maryland College Park, MD 20742

Dr. Fred Luthans Regents Professor of Management University of Nebraska - Lincoln Lincoln, NE 68588

Dr. R. R. Mackie Human Factors Research A Division of Canyon Research 5775 Dawson St. Golera, CA 93017

Dr. William H. Mobley College of Business Admin. Texas A&M University College Station, TX 77843

Dr. Thomas M. Ostrom
Dept. of Psychology
The Ohio State University
116E Stadium
404C West 17th Avenue
Columbus, OH 43210

Dr. William G. Ouchi Graduate School of Management University of California, Los Angeles Los Angeles, California 90024

Dr. Irwin G. Sarason Dept. of Psychology, NI-25 University of Washington Seattle, WA 98195 Dr. Benjamin Schneider Department of Psychology Michigan State University East Lansing, MI 48824

Dr. Edgar H. Schein Sloan School of Management Massachusetts Institute of Technology Cambridge, MA 02139

H. Ned Seelye International Resource Development, Inc. P. O. Box 721 LaGrange, IL 60525

Dr. H. Wallace Sinaiko
Program Director, Manpower Research
and Advisory Services
Smithsonian Institution
801 N. Pitt St., Suite 120
Alexandria, VA 22314

Dr. Richard M. Steers Graduate School of Management University of Oregon Eugene, OR 97403

Dr. Siegfried Streufert Dept. of Behavioral Science The Pennsylvania State University Milton S. Hershey Medical Center Hershey, PA 17033

Dr. James R. Terborg University of Oregon, West Campus Dept. of Management Eugene, OR 97403

Dr. Howard M. Weiss Dept. of Psychological Sciences Purdue University West Lafayette, IN 47907

Dr. Philip G. Zimbardo Dept. of Psychology Stanford University Stanford, CA 94305

List 15 Current Contractors

Dr. Richard D. Arvey
University of Houston
Department of Psychology
Houston, TX 77004

Dr. Stuart W. Cook Institute of Behavioral Science #6 University of Colorado Box 482 Boulder, CO 80309

Dr. L. L. Cummings Kellogg Graduate School of Management Northwestern University Nathaniel Leverone Hall Evanston, IL 60201

Dr. Henry Emurian
The Johns Hopkins University
School of Medicine
Department of Psychiatry &
Behavioral Science
Baltimore, MD 21205

Bruce J. Bueno De Mesquita University of Rochester Dept. of Political Science Rochester, NY 14627

Dr. John P. French, Jr. University of Michigan Institute for Social Research P.O. Box 1248 Ann Arbor, MI 48106

Dr. Paul S. Goodman Graduate School of Industrial Admin. Carnegie-Nellon University Pittsburgh, PA 15213

Dr. J. Richard Hackman
School of Organization & Management
Box 1A
Yale University
New Haven, CT 06520

Dr. Lawrence R. James School of Psychology Georgia Institute of Technology Atlanta, GA 30332

Allan P. Jones University of Houston 4800 Calhoun Houston, TX 77004